# Will Epperson

I'm a Ph.D. student in the HCII at CMU advised by Dominik Moritz and Adam Perer.

My research interests lie in **developing ways to make complex systems easier to use and understand for experts and non-experts**. I am interested in how we can build tools to help users interact with their data through understandable Machine Learning, interactive visualizations, and recomended analysis. I'm also interested in how these techniques can be applied to the medical domain to improve both doctor and patient experiences.

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CV PDF

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Google Scholar

LinkedIn

### Education

August 2020 - Present

#### Ph.D. in Human Computer Interaction

Carnegie Mellon University

Advisor: Dominik Moritz, Co-advisor: Adam Perer

August 2016 - May 2020

#### **B.S. in Computer Science**

Georgia Institute of Technology

GPA: 4.0, Summa Cum Laude, threads in Intelligence and Modeling/Simulation

## **Publications**

#### FairVis: Visual Analytics for Discovering Intersectional Bias in Machine Learning

Angel Cabrera, Will Epperson, Fred Hohman, Minsuk Kahng, Jamie Morgenstern, Duen Horng (Polo) Chau

IEEE Conference on Visual Analytics Science and Technology (VAST). Vancouver, Canada, 2019.

Project ▶ Demo 🖟 PDF 🗏 Blog ■ Recording ■ Slides 🥠 Code 🗏 BibTeX

#### **RECAST: Interactive Auditing of Automatic Toxicity Detection Models**

Austin P. Wright, Omar Shaikh, Haekyu Park, Will Epperson, Muhammed Ahmed, Stephane Pinel, Diyi Yang, Duen Horng (Polo) Chau

The eighth International Workshop of Chinese CHI. 2020.

## Talks

**FairVis** 

May 2019

**IEEE Visualization Conference** 

## **Honors and Awards**

2019

PURA: President's Undergraduate Research Award \$1500 research grant to continue work on FairVis project

2016

#### Stamps President's Scholarship

## Research Experience

January 2019 - May 2020

Georgia Institute of Technology, Atlanta, GA

Undergraduate Researcher, Polo Club of Data Science

Advisor: Duen Horng (Polo) Chau

Member of the Polo Club of Data Science working on novel data visulizations to find fairness issues in Machine Learning models

January 2018 - May 2019

Georgia Institute of Technology, Atlanta, GA

Undergraduate Researcher, Automated Algorithm Design

Advisor: Jason Zutty, Greg Rohling

Worked on EMADE algorithm design engine to implement sentiment analysis pipeline to analyze news articles to aid in predicting stock price movements using genetic algorithms. Led project to visualize the genetic algorithm evolution process.

## **Industry Experience**

Summer 2019

Point72 Asset Management, New York, NY

Data Analytics Intern, Market Intelligence Group

Mentor: Trevor Rempel

Worked as Data Scientist in alternative data space to clean, model, and understand large datasets

Summer 2018

Ultimate Software, Weston, FL

Software Development Intern, Innovation Strategies Team

Mentor: Joseph Cutrono

Designed and developed Slack app to integrate with the UltiPro HR management tool. App published to Slack app store.

## **Teaching**

August 2017 - December 2018

#### **Undergraduate Teaching Assistant**

Georgia Institute of Technology, Atlanta, GA

Intro to Database Systems (CS 4400), Instructor: Monica Sweat Designed projects, held office hours and graded for relational databases class.

## Leadership & Activities

January 2019 - May 2020

#### Student Ambassador

Georgia Institute of Technology Alumni Association

Serve as official representative of the Institute at events/tours for alumni, prospective students, and special guests.

January 2018 - May 2019

#### **Executive Board Member -- Threads Co-chair**

Stamps Scholars National Convention 2019

Executive board member of Stamps Scholars National Convention, a 3-day conference with over 700 student attendees. Responsible for 20-person committee that plans and coordinates the different content threads of the convention.